



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,027	08/29/2001	Lakshmi Kutty Cheeniyil	70006393-1	9525

7590 04/18/2006

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

THAI, CANG G

ART UNIT	PAPER NUMBER
----------	--------------

3629

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/943,027	Applicant(s) CHEENIYIL ET AL.	
	Examiner Cang G. Thai	Art Unit 3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This is in response to an amendment file on 03/03/2006 for letter for patent filed on 08/29/2001. Claims 1-10 are pending in the letter.

Response to Arguments

1. The United States Patent and Trademark Office has considered the applicant's arguments filed 03/03/2006, but has not found those arguments to be persuasive.

Applicant argues that the prior art fails to teach the aspects of the process instance is checked during the execution of the original process definition whether the process instance meets a migration condition and that the process instance is migrated to a modified process definition such that the process instance, after migrating, executes the changed process definition. In particular, UNDERWOOD teaches the aspects of the process instance in the migration control tools that control multiple versions of source code, data, and other items as they are changed, tested, and moved from one development environment into another, for example, from development to test and from test to production (Column 78, Lines 41-45). The source code is require in order for the execution to take place, for example for each code fix, a complete assembly test may be re-executed (Column 191, Lines 66-67).

Status of Claims

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3629

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,704,873 (UNDERWOOD).

As for claim 1, UNDERWOOD discloses a method for executing a work flow in a WFMS having at least one process instance executing an original process definition, and migrating the said process instance to changed process definition, said method comprising the following steps:

a) checking each process instance during the execution of the original process definition whether the process instance meets a migration condition [checking the original process to determine if it meets the condition for data transfer] {Column 28, Lines 45-48 wherein this reads over “first, in operation 800 a plurality of sub-activities are created which each include sub-activity logic adapted to generate output based on a input received from a user upon execution”}; and

b) migrating each process instance during the execution the original process definition to a modified process definition if the migration condition is met such that said process instance executes said changed process definition [modifying the data transfer once the condition is met during the execution] {Column 28, Lines 48-51, wherein this reads over “in operation 802, a plurality of activities are defined, each of which execute

Art Unit: 3629

the sub-activities in a unique manner upon being selected for accomplishing a goal associated with the activity”}.

As for claim 2, UNDERWOOD discloses a method according claim 1, wherein checking each process instance further comprises the following steps:

defining a set of worst case migration points (WMP) [checking each process and defining a worst case transfer] {Column 92, Lines 35-38, wherein this reads over “in a worst case scenario, an object can be spread across many tables, with a single select/insert for each table, and as each object is loaded one by one, the performance becomes very poor”}, and

migrating the process instance to the modified process definition, if its execution has not gone beyond anyone said worst case migration points (WMP) [data transfer for the worst case transfer] {Column 243, Lines 18-19, wherein this reads over “the CM plan should detail the review and migration process for each configuration type”}.

As for claim 3, UNDERWOOD discloses a method according to claim 2, said step of defining a set of worst case migration points (WMP) comprises one of the following actions:

reading a set of worst case migration points (WMP) from an user input [detecting the worst case migration] {Column 97, Lines 15-18, wherein this reads over “By comparing actual results with expected results, the application tester and developer can quickly detect design and development errors within the system”}, or

computing a set of worst case migration points (WMP) based upon the original process definition and the modified process definition [reconfigure the worst case data

Art Unit: 3629

transfer file] {Column 99, Lines 29-31, wherein this reads over "The ReTA Security Management Architecture includes security issues, concerns and recommendations associated with Net-Centric Computing"}.

As for claim 4, UNDERWOOD discloses a method according to claim 3, said step of computing a set of worst case migration points (WMP) comprises the following steps:

defining a set D including all nodes that are changed in the modified process definition with respect to the original process definition {See Fig. 22, Element 2200};

determining a set P including all predecessor nodes for all nodes belonging to set D {See Fig. 22, Element 2202};

determining a reachability matrix $R=(r_{ij})$ for all nodes belonging to set P, each row and column in the reachability matrix R representing a node in the order listed in P, wherein a node X representing a column is regarded as reachable from a another node representing a row, if there exists a path of arcs forward from X to Y {See Fig. 22, Element 2204}; and

determining the set of worst case migration points from the reachability matrix R {See Fig. 22, Element 2206}.

As for claim 5, UNDERWOOD discloses a method according to claim 4, wherein the step of determining the reachability matrix $R=(r_{ij})$ further comprises the following actions:

attributing a value of x to each reachability matrix element r_{ij} if the predecessor node corresponding to said column j is reachable from the node corresponding to said row i {See Fig. 72A, Element 7202};

attributing a value of x to each reachability matrix element r_{zz} {See Fig. 72A, Element 7204}; and

attributing a value of y to each reachability matrix element r_{ij} if the predecessor node corresponding to said column is not reachable from the node corresponding to said row i {See Fig. 72A, Element 7206}.

As for claim 6, UNDERWOOD discloses a method according to claim 5, wherein the worst case migration points are determined by selecting those predecessor nodes for which the elements r_{ij} from the corresponding column add to a value of x {See Fig. 72A, Element 7208}.

As for claim 7, UNDERWOOD discloses a method according to claim 6, wherein a value of 1 is chosen for x and a value of 0 is chosen for y {See Fig. 72A, Element 7210}.

As for claim 8, UNDERWOOD discloses a method according to claim 1, wherein said step of checking each process instance during the execution of the original process definition whether it meets a migration condition further comprises of steps for checking whether the node(s) in the original process definition being currently executed is/are also present in the modified process definition [monitoring the data transfer process to ensure it meets criteria] {Column 102, Lines 28-31, wherein this reads over "Application auditing and logging is often overlooked because it is less than glamorous, but it does provide security administrators with a crucial tool for monitoring use of an application"}.

As for claim 9, UNDERWOOD discloses a method according to claim 8, wherein the step of checking whether a node in the original process definition being currently executed is also present in the modified process definition is repeated upon executing of each node(s) of the original process definition until the migration of said process instance is completed [monitoring the data transfer with modifications until the process is complete] {Column 102, Lines 33-36, wherein this reads over “logs can monitor a virtual myriad of data, including access times, user IDs, locations from where the application was accessed, actions the user performed, and whether or not those actions were successfully completed”}.

As for claim 10, UNDERWOOD discloses a method for creating a process definition to be executed by a WFMS comprising the following steps:

- a) defining an original process definition to be executed in a work flow system {See Fig. 9A, Element 902};
- b) starting execution the process instance as per the original process definition {See Fig. 9A, Element 904};
- c) defining a modified process definition {See Fig. 9A, Element 906};
- d) checking for each process instance whether a migration condition is met {See Fig. 9A, Element 908}; and
- e) replacing the nodes of the original process definition in a running process instance satisfying the migration condition by the corresponding nodes of the modified process definition such that said running process instance executes said modified

Art Unit: 3629

process definition such that said running process instance executes said modified process definition {See Fig. 9A, Element 910}.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

No claims are allowed.

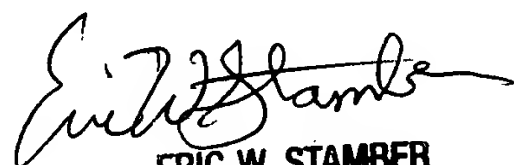
Art Unit: 3629

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cang (James) G. Thai whose telephone number is (571) 272-6499. The examiner can normally be reached on 6:30 AM - 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CGT
03/10/2006


ERIC W. STAMBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600